

## SEQUENCE LISTING

&lt;110&gt; UNIVERSITY OF GEORGIA RESEARCH FOUNDATION, INC.

<120> STABILIZED BIOACTIVE PEPTIDES AND METHODS OF  
IDENTIFICATION, SYNTHESIS AND USE

&lt;130&gt; 235.00010201

&lt;140&gt; Unassigned

&lt;141&gt; 1999-10-12

&lt;150&gt; 60/104,013

&lt;151&gt; 1998-10-13

&lt;150&gt; 60/112,150

&lt;151&gt; 1998-12-14

&lt;160&gt; 110

&lt;170&gt; PatentIn Ver. 2.0

&lt;210&gt; 1

&lt;211&gt; 133

&lt;212&gt; DNA

&lt;213&gt; Escherichia coli

&lt;400&gt; 1

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ggcagtgagc gcaacgcaat taatgtgagt tagctcactc attaggcacc ccaggcttta 60
cactttatgc ttccggetcg tatgttgtgt ggaattgtga gcggataaca atttcacaca 120
ggaaacagct atg                                     133

```

&lt;210&gt; 2

&lt;211&gt; 25

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: peptide  
having opposite charge ending motif

&lt;400&gt; 2

```

Met Glu Asp Glu Asp Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1             5             10             15

```

```

Xaa Xaa Xaa Xaa Xaa Arg Lys Arg Lys
      20             25

```

&lt;210&gt; 3

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: stabilized  
angiotensin

&lt;400&gt; 3

Pro Pro Asp Arg Val Tyr Ile His Pro Phe His Ile Pro Pro  
1 5 10

&lt;210&gt; 4

&lt;211&gt; 18

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: stabilized  
angiotensin

&lt;400&gt; 4

Glu Asp Glu Asp Asp Arg Val Tyr Ile His Pro Phe His Ile Arg Lys  
1 5 10 15

Arg Lys

&lt;210&gt; 5

&lt;211&gt; 10

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5

Asp Arg Val Tyr Ile His Pro Phe His Ile  
1 5 10

&lt;210&gt; 6

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: primer

<400> 6  
gttgccattg ctccaggcat

<210> 7  
<211> 42  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: primer

<400> 7  
ctggattcca taagatcttc cctatgtgaa attgttacc gc 42

<210> 8  
<211> 37  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: primer

<400> 8  
attgaattca ccattggacac catcgaaatgg tgcaaaa 37

<210> 9  
<211> 19  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: primer

<400> 9  
attgttgcca ttgctgcag 19

<210> 10  
<211> 43  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: primer

<400> 10  
tgtatgaatt ccagggtacc atggttgaag accaaagggc ctc 43

<210> 11

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 11

tactatagat ctatgaccat gattacggat tcaactg

36

<210> 12

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 12

tacataaagg ttggcctgcc cggttattat tatctt

36

<210> 13

<211> 47

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 13

tatcatctgc agaggaaaca gctatgacca tgattacgga ttcactg

47

<210> 14

<211> 47

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 14

tacatactcg agcaggaaag ctggcctgc cgggttatta ttatttt

47

<210> 15

<211> 47

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 15

tatcatggat ccaggaacaa gatatgacca ttattacaga ttcaatg

47

<210> 16

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 16

tattatagat ctatggctat ccagcaaaaac aaacag

36

<210> 17

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 17

atatataagc ttttaaaaat ctctgttagt ttctgctacg

40

<210> 18

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 18

tactatagat ctatgaacaa aggtgtaatg ccacc

35

<210> 19

<211> 38

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 19

attagtgaaat cagcacaataa tctgaataaa ctgcgt

31

<210> 20

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer  
fragment

<400> 20

agatcttatg aattc

15

<210> 21

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer  
fragment

<400> 21

agatcttatg aattc

15

<210> 22

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer  
fragment

<400> 22

agatcttatg aattc

15

<210> 23

<211> 93

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: randomized  
oligonucleotide

&lt;400&gt; 23

tactatagat ctatggnnnn nnnnnnnnn nnnnnnnnn nnnnnnnnn nnnnnnnnn 10  
nnnnnnnn nnnntaatg gtaattctcg aca 20

&lt;210&gt; 14

&lt;211&gt; 18

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: primer

&lt;400&gt; 24

tctcgagaat tcttatta 10

&lt;210&gt; 25

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: primer

&lt;400&gt; 25

tcattaatgc agctggcacg 20

&lt;210&gt; 16

&lt;211&gt; 10

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: primer

&lt;400&gt; 16

ttcataacg gtgcctgact 20

&lt;210&gt; 17

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: primer

&lt;400&gt; 27

tactcaacta attaggtacc 20

<210> 28

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 28

atgacgatg agcgaattgt

28

<210> 29

<211> 92

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide

<400> 29

tactatagat ctacggtcac tgaattttgt ggcttggtgg accaactgac ttagtaatag 60  
tggagagctg aaattaataa gaattctcga ca 92

<210> 30

<211> 91

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide

<400> 30

tactatagat ctacgtggcg ggactcatgg attaagggtg gggacgtggg gtttatgggt 60  
taaaatagtt tgataataag aattctcgac a 91

<210> 31

<211> 92

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide

<400> 31



tactatagat ctatgaacgg cagaaccata cgaatccggg gcttaccagt agcttaata 60  
gctaccacgt ggggttaata gaattctcga ca 81

<210> 81

<211> 93

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide

<400> 32

tactatagat ctacggacgg tgaagtcatg tctgoggcaa aacagggaatg gaaggaaaga 60  
acgtatagg cgggttaata agaattctcg aca 80

<210> 33

<211> 93

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide

<400> 33

tactatagat ctacgagggg cgccaactaa ggggggggga aggtatttgt cccgtgcata 60  
atctgggtg ttgtataata agaattctcg aca 93

<210> 34

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized  
peptide

<400> 34

Met Val Thr Glu Phe Cys Gly Leu Leu Asp Gln Leu Pro  
1 5 10

<210> 35

<211> 86

<212> DNA

<213> Artificial Sequence

&lt;210&gt;

<213> Description of Artificial Sequence: nucleic acid  
encoding stabilized peptide

&lt;400&gt; 35

caggaaagat ctatggtcac tgaattttgt ggtttgttga accaactgac tagtaataag 60  
tggaaggtg aaattaataa gaattc 80

&lt;210&gt; 36

&lt;211&gt; 16

&lt;212&gt; FET

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: stabilized  
peptide

&lt;400&gt; 36

Met Trp Arg Asp Ser Trp Ile Lys Gly Arg Asp Val Gly Phe Met Gly  
1 5 10 15

&lt;210&gt; 37

&lt;211&gt; 85

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: nucleic acid  
encoding stabilized peptide

&lt;400&gt; 37

caggaaagat ctatgtgggg ggaactcatgg attaagggta gggacgtggg gtttatgggt 60  
taaaatagtt tgataataag gaattc 85

&lt;210&gt; 38

&lt;211&gt; 141

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: nucleic acid  
encoding stabilized peptide

&lt;400&gt; 38

caggaaagat ctatgtcagg gggacatgtg acgagggagt gcaagtggg gttgtccaat 60  
cgttggtat acgtaataag aattctcatg tttagacagt tatcatgat aagctttaat 120  
gggtagttt atcacagtta a 141

<210> 39

<211> 41

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized peptide

<400> 39

Met Ser Gly Gly His Val Thr Arg Glu Cys Lys Ser Ala Met Ser Asn

1

5

10

15

Arg Trp Ile Tyr Val Ile Arg Ile Leu Met Ile Asp Ser Leu Ser Ser

20

25

30

Ile Ser Phe Asn Ala Val Val Tyr His Ser

35

40

<210> 40

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized peptide

<400> 40

Met Tyr Leu Phe Ile Gly

1

5

<210> 41

<211> 75

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid encoding stabilized peptide

<400> 41

caggaaagat ctatgtattt gttcatcgga taatacttaa tggatcggtg gagaacttea 60  
gtttaataag attc 75

&lt;210&gt; 40

&lt;211&gt; 87

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: nucleic acid  
encoding stabilized peptide

&lt;400&gt; 40

caggaaagat ctatgottct atttgggggg gactgggggc agaaagccgc atactttact 60  
ctgctaccgt caaggtaata agaattc 87

&lt;210&gt; 43

&lt;211&gt; 20

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: stabilized  
peptide

&lt;400&gt; 43

Met Leu Leu Phe Gly Gly Asp Cys Gly Lys Ala Gly Tyr Phe Thr Val  
1 5 10 15Leu Pro Ser Arg  
20

&lt;210&gt; 44

&lt;211&gt; 75

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: nucleic acid  
encoding stabilized peptide

&lt;400&gt; 44

caggaaagat ctatgattgg gggatcgttg agcttcgctt gggcaatagt ttgtaataag 60  
gatttcctatg ttgtga 75

&lt;210&gt; 45

&lt;211&gt; 20

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;120&gt;

&lt;123&gt; Description of Artificial Sequence: stabilized peptide

&lt;400&gt; 45

Met Ile Gly Gly Ser Leu Ser Phe Ala Trp Ala Ile Val Cys Asn Lys  
1 5 10 15Asn Ser His Val  
20

&lt;110&gt; 46

&lt;111&gt; 14

&lt;112&gt; FRT

&lt;113&gt; Artificial Sequence

&lt;120&gt;

&lt;123&gt; Description of Artificial Sequence: stabilized peptide

&lt;400&gt; 46

Met Asn Gly Arg Thr Lys Arg Ile Arg Asp Pro Pro Ala Ala  
1 5 10

&lt;210&gt; 47

&lt;211&gt; 86

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: nucleic acid encoding stabilized peptide

&lt;400&gt; 47

caggaaagat ctatgaacgg ccgaacccaaa cgaatccggg acccaccagg cgcctaaaca 60  
gctaccagct gtcgtataaa gaattc 86

&lt;210&gt; 48

&lt;211&gt; 18

&lt;212&gt; FRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: stabilized peptide

&lt;401&gt; 41

Met Asp Arg Glu Val Met Cys Ala Ala Lys Glu Glu Trp Lys Glu Arg

1

5

10

15

Thr Pro

&lt;210&gt; 49

&lt;211&gt; 87

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: nucleic acid  
encoding stabilized peptide

&lt;400&gt; 49

caggaaagat ctatggacgg tgaagtgatg tgtggggcag aacaggaatg gaaggaacga 60  
acgcacatagg ccgcgtaata agaatto 87

&lt;210&gt; 50

&lt;211&gt; 87

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: nucleic acid  
encoding stabilized peptide

&lt;400&gt; 50

caggaaagat ctatgtagcc caatgcactg ggagcacggg tgtaggtct agaagccacg 60  
taccattta atccataata agaatto 87

&lt;210&gt; 51

&lt;211&gt; 12

&lt;212&gt; PPT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: stabilized  
peptide

&lt;400&gt; 51

Met Leu Gly Leu Glu Ala Thr Tyr Pro Phe Asn Pro

1

5

10

(210) 50

(211) 5

(212) PRT

(213) Artificial Sequence

(220)

(223) Description of Artificial Sequence: stabilized peptide

(400) 52

Met Arg Gly Ala Asn

1

5

(210) 53

(211) 87

(212) DNA

(213) Artificial Sequence

(220)

(223) Description of Artificial Sequence: nucleic acid encoding stabilized peptide

(400) 53

caggaaagat ctatgagggg cgcacaactaa gggggggggga aggtatttgt cccgtgcata 60  
atctcgggtg ttgtctaata agaattc 87

(210) 54

(211) 4

(212) PRT

(213) Artificial Sequence

(220)

(223) Description of Artificial Sequence: N-terminal protective sequence

(400) 54

Xaa Pro Pro Xaa

1

(210) 55

(211) 36

(212) DNA

(213) Artificial Sequence

(220)

(223) Description of Artificial Sequence: primer

<400> 55  
tactatagat ctatnaccaa acaagaaaaa accgac 36

<210> 56  
<211> 36  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: primer

<400> 56  
tataagtatt cagttgctca catgttcttt cctgac 36

<210> 57  
<211> 41  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: primer

<400> 57  
aattcatact atagatctat gaccaaacag gaaaaaacgc c 41

<210> 58  
<211> 42  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: primer

<400> 58  
tatataatac atgtcagaat togaggtttt caccgtcacc ac 42

<210> 59  
<211> 96  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: randomized  
oligonucleotide

<400> 59  
tactatagat ctatgaaaaa nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60



nnnnnnnnnn nnnnnccatag atctggctgc tggcat

95

<210> 60

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 60

atcacagcac gcagatctat g

21

<210> 61

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: randomized  
oligonucleotide

<400> 61

tactatgaat tonnngaatt ctgccaccac tactat

36

<210> 62

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 62

atagtagtgg tggcagaatt c

21

<210> 63

<211> 105

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: randomized  
oligonucleotide

<400> 63

tactatagat ctatgcgcgc gnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60  
nnnnnnnnnn nnnnnnnnnn nccgcgcgtaa taagaattcg tacat 105

<210> 64  
 <211> 14  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: primer

<400> 64  
 atgtacgaat tcttattacg gagg 24

<210> 65  
 <211> 90  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: randomized  
 oligonucleotide

<400> 65  
 tactatagat ctatgvanva nvanvanvan vanvanvanv anvanvanva nvanvanvan 60  
 vanvantaat aagaattctc ccagcactat 90

<210> 66  
 <211> 14  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: primer

<400> 66  
 atagtggtgg cagaattctt atta 24

<210> 67  
 <211> 105  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: randomized  
 oligonucleotide

<400> 67  
 tactatagat ctatggaaga cgaagacnna nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60  
 nnnnnnnnnn nnnnnnctaa acgtaaataa taagaattcg tacat 105

<210> 68  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: primer

<400> 68  
 atgtacgaat ttttattatt taagtttacg 30

<210> 69  
 <211> 81  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: nucleic acid  
 encoding stabilized peptide

<400> 69  
 agatctatgc cgcgcattct atggggcgaa gcgagaaagc gcttgtgggg tggggatcat 60  
 ataccgcgct aataagaatt c 81

<210> 70  
 <211> 21  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: stabilized  
 peptide

<400> 70  
 Met Pro Pro Ile Leu Trp Gly Glu Ala Arg Lys Arg Leu Trp Gly Gly  
 1 5 10 15  
 Asp His Thr Pro Pro  
 20

<210> 71  
 <211> 90  
 <212> DNA  
 <213> Artificial Sequence

<220>

(223) Description of Artificial Sequence: nucleic acid  
encoding stabilized peptide

(400) 71

agatctatgc cgcgcgcgtt ggarattgtt tcgggtattg agcaggagg gatttctgg 60  
tgcgcgcata ttaagaattc tctgtttga 91

(210) 72

(211) 27

(212) PRT

(213) Artificial Sequence

(220)

(223) Description of Artificial Sequence: stabilized  
peptide

(400) 72

Met Pro Pro Pro Leu Asp Ile Val Ser Gly Ile Glu Val Gly Gly His  
1 5 10 15

Leu Trp Cys Arg Arg Ile Lys Asn Ser His Val  
20 25

(210) 73

(211) 81

(212) DNA

(213) Artificial Sequence

(220)

(223) Description of Artificial Sequence: nucleic acid  
encoding stabilized peptide

(400) 73

agatctatgc cgcgcgacaa tcgggtcttg tgatgaagcg gaggtcgacc aaggggatat 60  
cagcgcgcgt aataagaatt c 81

(210) 74

(211) 8

(212) PRT

(213) Artificial Sequence

(220)

(223) Description of Artificial Sequence: stabilized  
peptide

(400) 74

Met Pro Pro Asp Asn Pro Val Leu

1

F

<210> 75  
 <211> 81  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: nucleic acid  
 encoding stabilized peptide

<400> 75  
 agatctatgc cgcgcctatt ggaeggagat gacaaataga tatatgogtg gttgtttttc 60  
 tptcgcgagt aataagaattc 81

<210> 76  
 <211> 10  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: stabilized  
 peptide

<400> 76  
 Met Pro Pro Leu Leu Asp Gly Asp Asp Lys  
 1 5 10

<210> 77  
 <211> 79  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: nucleic acid  
 encoding stabilized peptide

<400> 77  
 agatctatgc cgcgcgaggtg gaagatgttg ataagacagt gacagatggy ttccattact 60  
 cccgcgcgtaa taagaattc 79

<210> 78  
 <211> 11  
 <212> PRT  
 <213> Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: stabilized peptide

&lt;400&gt; 75

Met Met Pro Arg Trp Lys Met Leu Ile Arg Gln  
1 5 10

&lt;210&gt; 79

&lt;211&gt; 39

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: nucleic acid encoding stabilized peptide

&lt;400&gt; 79

agatctatga tgagagttagc gcgcgcgtaa taagaattc 39

&lt;210&gt; 80

&lt;211&gt; 7

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: stabilized peptide

&lt;400&gt; 80

Met Met Arg Val Ala Pro Pro  
1 5

&lt;210&gt; 81

&lt;211&gt; 81

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: nucleic acid encoding stabilized peptide

&lt;400&gt; 81

agatctatga cgcgcgttgcg cggggcatgc gatgtatatg gggtaaattg aatgtcttgc 60  
gggcgcgcgt aataagaatt c 81

<210> 82

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized peptide

<400> 82

Met Pro Pro Leu Arg Gly Ala Cys Asp Val Tyr Gly Val Asn  
1 5 10

<210> 83

<211> 81

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid encoding stabilized peptide

<400> 83

agatctatgc cgcgggggag aggggaagcg gtgggagtga catgottgag cgcgaacgtg 60  
taccggcgt aataagaatt c 81

<210> 84

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized peptide

<400> 84

Met Pro Pro Gly Arg Gly Glu Ala Val Gly Val Thr Cys Leu Ser Ala  
1 5 10 15

Asn Val Tyr Pro Pro  
20

<210> 85

<211> 81

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid  
encoding stabilized peptide

<400> 85

agatctatgc cgcggggaag ggtagtcttc ttgtcgcta tcttctttc cgaatatgc 60  
ctccggcgt aataagaatt c 81

<210> 86

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized  
peptide

<400> 86

Met Pro Pro Gly Arg Val Val Phe Phe Val Ala Ile Phe Val Ser Ala  
1 5 10 15

Ile Cys Leu Pro Pro  
20

<210> 87

<211> 81

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid  
encoding stabilized peptide

<400> 87

agatctatgc cgcggaggtt cgtcatgag agtggttaaag ggtggggga cgttacaaa 60  
gtccggcgt aataagaatt c 81

<210> 88

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized  
peptide



(400) 88

Met Pro Pro Arg ILe Ala His Glu Ser Val Lys Gly Leu Gly Arg Val  
1 5 10 15

Thr Lys Ala Pro Pro  
20

(210) 89

(211) 72

(212) DNA

(213) Artificial Sequence

(220)

(223) Description of Artificial Sequence: nucleic acid  
encoding stabilized peptide

(400) 89

agatctatgc atgacgaaca agaggaggag cacaataaaa aggataacga aaaagaacac 60  
taataagaat to 72

(210) 90

(211) 18

(212) PRT

(213) Artificial Sequence

(220)

(223) Description of Artificial Sequence: stabilized  
peptide

(400) 90

Met His Asp Glu Glu Glu Glu His Asn Lys Lys Asp Asn Glu Lys  
1 5 10 15

Glu His

(210) 91

(211) 75

(212) DNA

(213) Artificial Sequence

(220)

(223) Description of Artificial Sequence: nucleic acid  
encoding stabilized peptide

(400) 91

agatctatgc accaggagca agagcaaggc aggatgagca agaggatcaa gaataataag 60  
aattctcatg ttgca 75

<210> 91

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized  
peptide

<400> 92

Met Gln Gln Glu His Glu Gln Gly Arg Met Ser Lys Arg Met Lys Asn  
1 5 10 15

Asn Lys Asn Ser His Val  
20

<210> 93

<211> 75

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid  
encoding stabilized peptide

<400> 93

agatctatga accatcataa tgaggccatg atcaacacaa tgaaacagag gaataataag 60  
aattctcatg ttgca 75

<210> 94

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized  
peptide

<400> 94

Met Asn His His Asn Glu Ala Met Ile Asn Thr Met Lys Thr Arg Asn  
1 5 10 15

Asn Lys Asn Ser His Val  
20

<210> 95  
 <211> 72  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: nucleic acid  
 encoding stabilized peptide

<400> 95  
 agatctatga acgacgacaa tcagcaagag gataatcatg atcagcctaa ggataacaaa 60  
 taataagaat tc 72

<210> 96  
 <211> 18  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: stabilized  
 peptide

<400> 96  
 Met Asn Asp Asp Asn Gln Gln Glu Asp Asn His Asp Gln His Lys Asp  
 1 5 10 15

Asn Lys

<210> 97  
 <211> 72  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: nucleic acid  
 encoding stabilized peptide

<400> 97  
 agatctatgc aagagcagga tcagcataat gataaccatc acgaggataa acataagaag 60  
 taataagaat tc 72

<210> 98  
 <211> 18  
 <212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized peptide

<400> 98

Met Gln Glu Gln Asp Gln His Asn Asp Asn His His Glu Asp Lys His  
1 5 10 15

Lys Lys

<210> 99

<211> 93

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid encoding stabilized peptide

<400> 99

agatctatgg aagacgaaga cgagggtgcy tcagcgtggg gaggcagaact ttggctcgtgg 60  
cagtcggtgc gtaaacgtaa ataataagaa ttc 93

<210> 100

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized peptide

<400> 100

Met Glu Asp Glu Asp Glu Gly Ala Ser Ala Trp Gly Ala Glu Leu Trp  
1 5 10 15

Ser Trp Gln Ser Val Arg Lys Arg Lys  
20 25

<210> 101

<211> 93

<212> DNA

<213> Artificial Sequence

&lt;220&gt;

<21> Description of Artificial Sequence: nucleic acid  
encoding stabilized peptide

&lt;400&gt; 101

agatctatgg aagacgaaga cggctagga atggggggtg ggtggtcag gctcacttta 60  
ttattcttcc gtaaacgtaa ataataagaa ttc 93

&lt;210&gt; 102

&lt;211&gt; 25

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: stabilized  
peptide

&lt;400&gt; 102

Met Glu Asp Glu Asp Gly Leu Gly Met Gly Gly Gly Leu Val Arg Leu  
1 5 10 15

Thr Leu Leu Phe Phe Arg Lys Arg Lys  
20 25

&lt;210&gt; 103

&lt;211&gt; 93

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: nucleic acid  
encoding stabilized peptide

&lt;400&gt; 103

agatctatgg aagacgaaga cggggagagg atccaggggg cccgtgtcc agtagcgtg 60  
gtagataaac gtaaacgtaa ataataagaa ttc 93

&lt;210&gt; 104

&lt;211&gt; 25

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: stabilized  
peptide

&lt;400&gt; 104

Met Glu Asp Glu Asp Gly Glu Arg Ile Gln Gly Ala Arg Cys Pro Val  
 1 5 10 15

Ala Leu Val Asp Arg Arg Lys Arg Lys  
 20 25

&lt;210&gt; 105

&lt;211&gt; 11

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: stabilized peptide

&lt;400&gt; 105

Met Glu Asp Glu Asp Asp Arg Gly Arg Gly Arg  
 1 5 10

&lt;210&gt; 106

&lt;211&gt; 93

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: nucleic acid encoding stabilized peptide

&lt;400&gt; 106

agatctatgg aagaacgaaga cgacaggggg cgtggggcgtt agctttaagt tgcgctaagt 60  
 tgcgagatac gtaaacgtaa ataataagaa ttc 93

&lt;210&gt; 107

&lt;211&gt; 93

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: nucleic acid encoding stabilized peptide

&lt;400&gt; 107

agatctatgg aagaacgaaga cggggggggcc gggaggaggg cctgtctttt ttcgcgcgtt 60  
 gttggggaac gtaaacgtaa ataataagaa ttc 93

<210> 108

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized peptide

<400> 108

Met Glu Asp Glu Asp Gly Gly Ala Gly Arg Arg Ala Cys Leu Cys Ser  
1 5 10 15

Ala Leu Val Gly Glu Arg Lys Arg Lys  
20 25

<210> 109

<211> 90

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid encoding stabilized peptide

<400> 109

agatctatgg aagacgaaga caagcgctgc gagaggagtg caaaagggcg tcatgtcgg 60  
cgtcgatgc gtaaactga ataagactgt 90

<210> 110

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized peptide

<400> 110

Met Glu Asp Glu Asp Lys Arg Arg Glu Arg Ser Ala Lys Gly Arg His  
1 5 10 15

Val Gly Arg Ser Met Arg Lys Arg Lys  
20 25